

New and validated hyphomycete taxa to resolve nomenclatural and taxonomic issues

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Abstract — While completing a compilation and evaluation of all genera of hyphomycetous anamorphs, several confused, invalid, or illegitimate names were encountered that require nomenclatural or taxonomic attention. New genera are proposed to replace the illegitimate names *Arnoldiella* (replaced with *Mycelephas*), *Harziella* (*Lepisticola*), and *Mackenziea* (*Mackenziella*). *Flahaultia* could not be validated because of homonymy and is replaced by *Flahaultiella*, with the new *F. microspora* as its type species. The new genera *Bhatia*, *Cheiroidea*, *Septosporiopsis*, and *Synnemacrodictys*, so far presented only in a PhD thesis, are described for accepted species formerly classified in *Acrodictys* that cannot be classified in existing genera. *Corynesporina* is validated by correcting aspects of its typification. *Goidanichiella*, with its type species represented by a lyophilized culture, is validated here because its protologue did not comply with Art. 37.7. A lectotype species is chosen for *Nematographium*. We comment on several nomenclatural issues for species of *Fusarium*. The typification of *Nectria mariannaeae* is clarified. *Symphyosirella* is proposed for several synnematosous seed parasites formerly included in the inadequately typified genus *Symphyosira*. To avoid destabilization of author citations, we generally have retained the original author citations, although the generic names will be valid and legitimate only from this publication.

Key words — anamorph taxonomy, International Code of Botanical Nomenclature

Introduction

For many years, we have been working on a book-length identification manual for hyphomycete genera to succeed the work by Carmichael et al. (1980). The present paper validates and legitimizes some genus and species names, or

clarifies their typification, in accordance with the rules of the International Code of Botanical Nomenclature (ICBN, McNeill et al. 2006). For the most part, the names are invalid under Art. 36 (no Latin diagnosis), Art. 37 (inadequate typification), or are illegitimate under Art. 53 (later homonym). The introduction of the new Art. 8.4 to the ICBN, which allows metabolically inactive fungal cultures to serve as type, also affects some names discussed here.

In order to avoid destabilization of established author citations, we have validated most taxa in the names of the original authors (with their acknowledged agreement), but the validity and legitimacy of the emended names will date from the present publication. A full author citation will thus include the original authors followed by the bibliographic indication ‘in Gams et al. 2009’.

Seven new genera are introduced for species that are already validly described, but that cannot be adequately classified in existing genera for various reasons. The rationales for these decisions are briefly discussed, but because the species are well described elsewhere, we provide only validating Latin diagnoses and new combinations here. Four of these genera (*Bhatia*, *Cheiroidea*, *Septosporiopsis*, and *Synnemacrodictys*) complete the revision of *Acrodictys* M.B. Ellis sensu lato undertaken by Baker et al. (2001, 2002a, 2002b) in the laboratory of GM-J; full arguments for these genera were presented by Baker (2002).

The genera

ARNOLDIELLA R.F. Castañeda 1984

nom. illegit. Art. 53.1, a homonym of *Arnoldiella* V.V. Mill. 1928 (*Chlorophyta*), to be replaced by:

MYCELEPHAS R.F. Castañeda, **nom. nov.**

MYCOBANK MB 514095

≡ *Arnoldiella* R.F. Castañeda, Revta Jard. Bot. Nac. Habana 5: 58. 1984.

ETYMOLOGY: Greek *mykes* = fungus, *elephas* = elephant, because the conidia suggest an elephant's head when seen from the front.

TYPE SPECIES: *Mycelephas robustus* (R.F. Castañeda) R.F. Castañeda, **comb. nov.**

MYCOBANK MB 514096

FIG. 1

≡ *Arnoldiella robusta* R.F. Castañeda, Revta Jard. Bot. Nac. Habana 5: 60. 1984 (basionym)

Diplorhynchus G. Arnaud (1952), nom. inval. (Art. 36) might apply to the same fungus, but its type (reported as extant by Nicot & Charpentié 1971) must be reexamined to verify this.

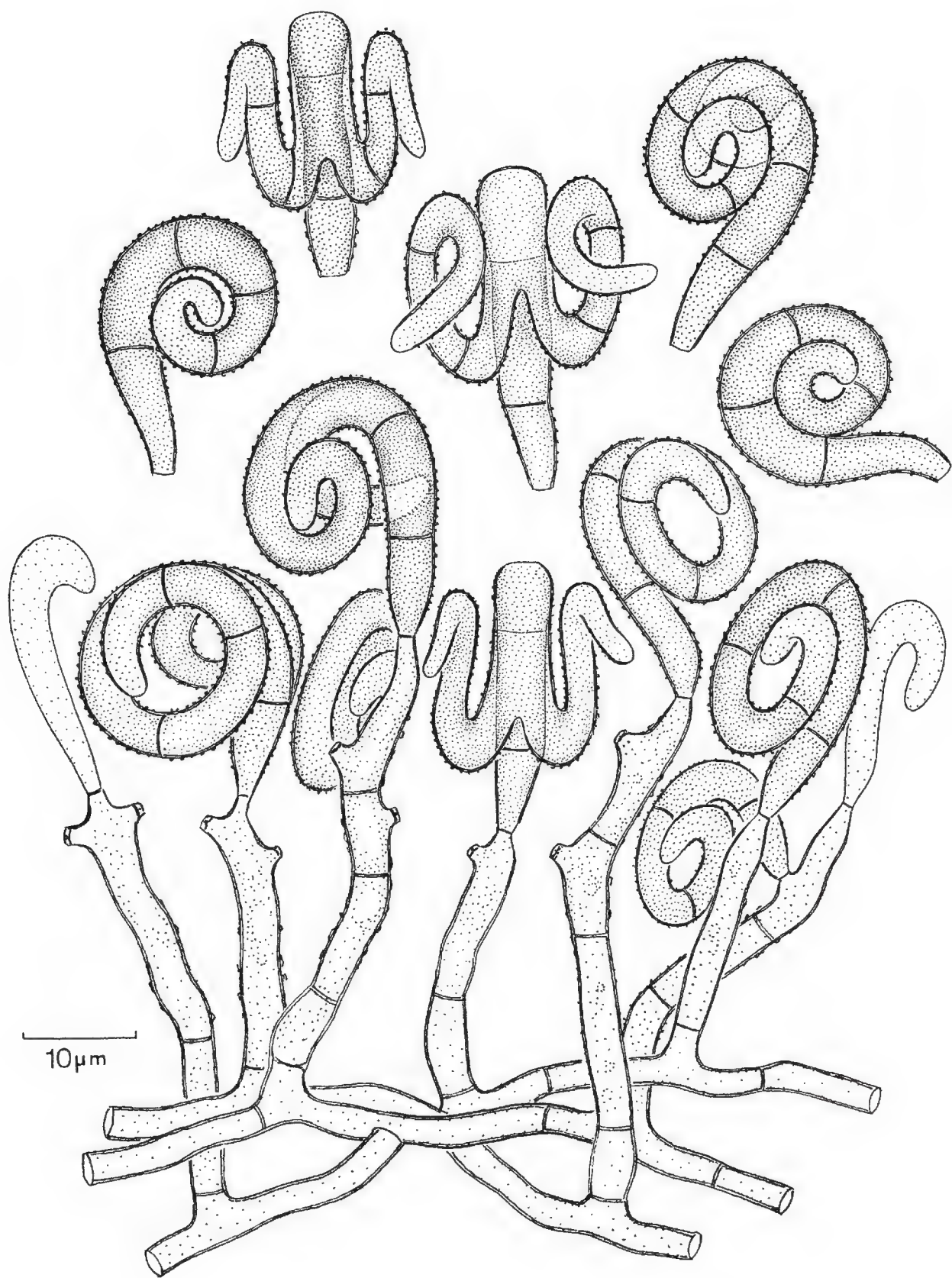


FIG. 1. *Mycelephas robustus*. Line drawings of conidiophores and conidia (after the protologue of *Arnodiella robusta* nom. illegit.).

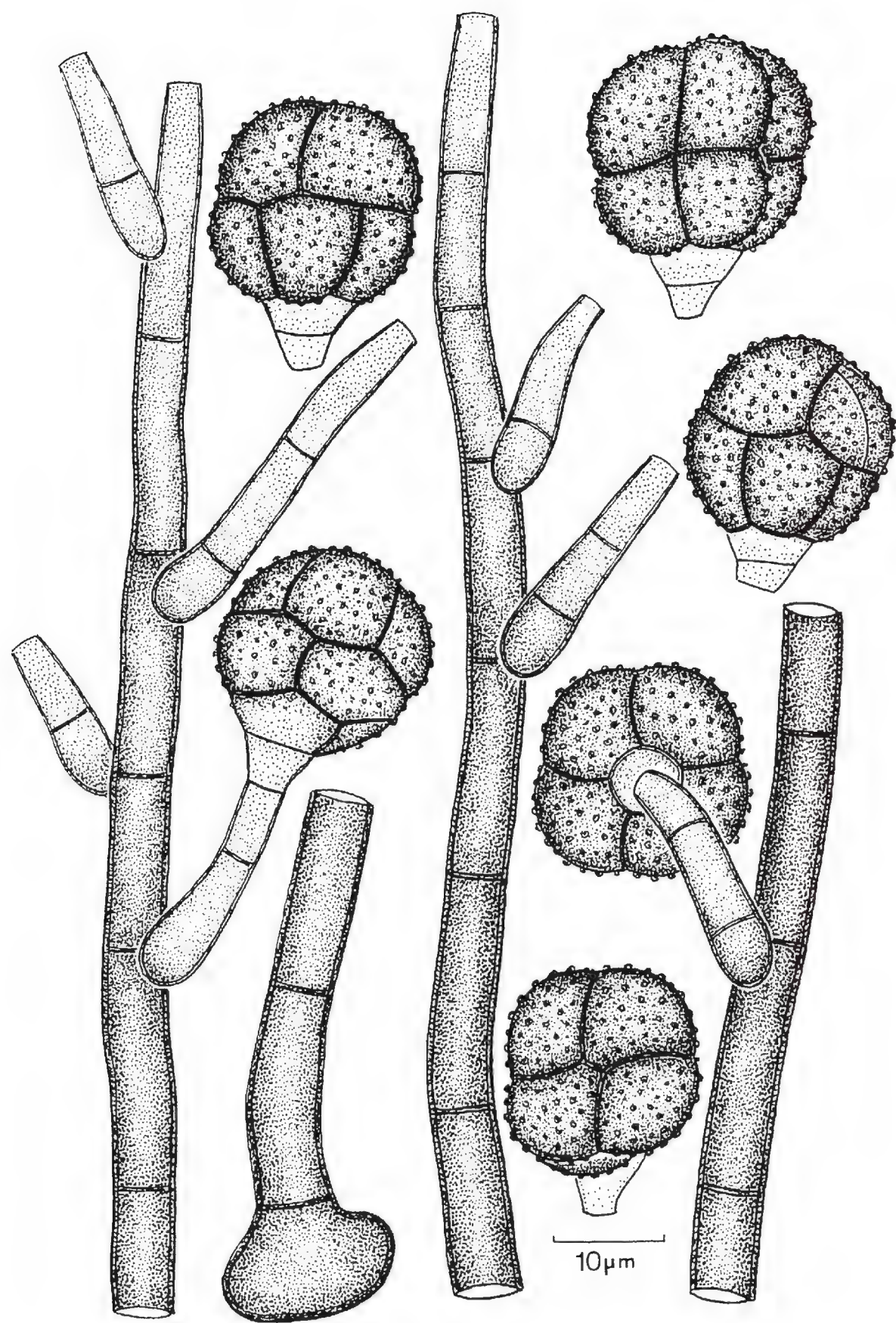


FIG. 2. *Bhatia malabarica*. Line drawings of conidiophores and conidia (redrawn and modified from the protologue).

BHATIA W.A. Baker & Morgan-Jones, **gen. nov.**

MYCOBANK MB 514087

Coloniae effusae, pilosae, atrobrunneae. Mycelium plerumque immersum, ex hyphis ramosis, septatis, pallide brunneis, laevibus, cylindricis compositum. Conidiophora macronemata, mononemata, singula, erecta, recta vel leniter flexuosa, laevia, cylindrica, septata, ramosa, brunnea, apicem versus pallidiora, ad basim inflata; rami simplices, attenuati, leniter undulati, septati, pallide brunnei. Cellulae conidiogenae integratae, terminales in axe principali et ramis lateralibus conidiophori, monoblasticae, subhyalinae vel pallide brunneae, determinatae. Conidia holoblastica, solitaria, sicca, acrogena, subglobosa vel turbinata, gangliogena, septis transversalibus, longitudinalibus et obliquis divisa, ad septa constricta, verruculosa, brunnea, cellula basali pallidiore, ad basim truncata, secessio schizolytica.

TYPE SPECIES: ***Bhatia malabarica*** (Subram. & Bhat) W.A. Baker & Morgan-Jones, **comb. nov.**

FIG. 2

MYCOBANK MB 514089

≡ *Acrodictys malabarica* Subram. & Bhat, Kavaka 15: 41, 1989 ('1987') (basionym).

ETYMOLOGY: Named in honour of Dr. D. Jayaram Bhat, in recognition of his contributions to our knowledge of hyphomycetes.

The branched conidiophores, strictly monoblastic conidiogenesis (lacking percurrent proliferation), and distinctively ornamented dictyoconidia distinguish *Bhatia* from other genera of the *Acrodictys* complex.

CHEIROIDEA W.A. Baker & Morgan-Jones, **gen. nov.**

MYCOBANK MB 514097

Coloniae effusae, pilosae, atrobrunneae. Mycelium plerumque immersum, ex hyphis ramosis, septatis, pallide brunneis, laevibus, cylindricis compositum. Conidiophora macronemata, mononemata, ex hyphis lateralibus oriunda, simplicia, erecta, recta vel leniter flexuosa, laevia, crassitunicata, cylindrica, ad basim inflata, septata, brunnea, interdum apicem versus pallidiora, percurrenter proliferantia. Cellulae conidiogenae in conidiophoris incorporatae, terminales, monoblasticae, pallide brunneae, ad apicem truncatae. Conidia holoblastica, solitaria, sicca, acrogena, digitata, cheiroidea, e cellula basali vel suprabasali communi et ramulis composita; ramuli recti vel curvati, adpressi, septis transversalibus et longitudinalibus divisi; conidia atrobrunnea, cellula basali pallidiore, ad basim truncata, secessio schizolytica.

TYPE SPECIES: ***Cheiroidea triarmata*** (Whitton, McKenzie & K.D. Hyde) W.A. Baker & Morgan-Jones, **comb. nov.**

FIG. 3

MYCOBANK MB 514099

≡ *Acrodictys triarmata* Whitton, McKenzie & K.D. Hyde, Fungal Diversity 4: 166. 2000 (basionym, HOLOTYPE HKU(M) 13034!).

ETYMOLOGY: Greek *cheir* = hand, *-oideus* = like.

This genus is proposed primarily in recognition of its peculiar cheiroid conidia, which have three branches, two originating from the basal cell attached to the conidiophores and the third arising from the proximal cell of one of the

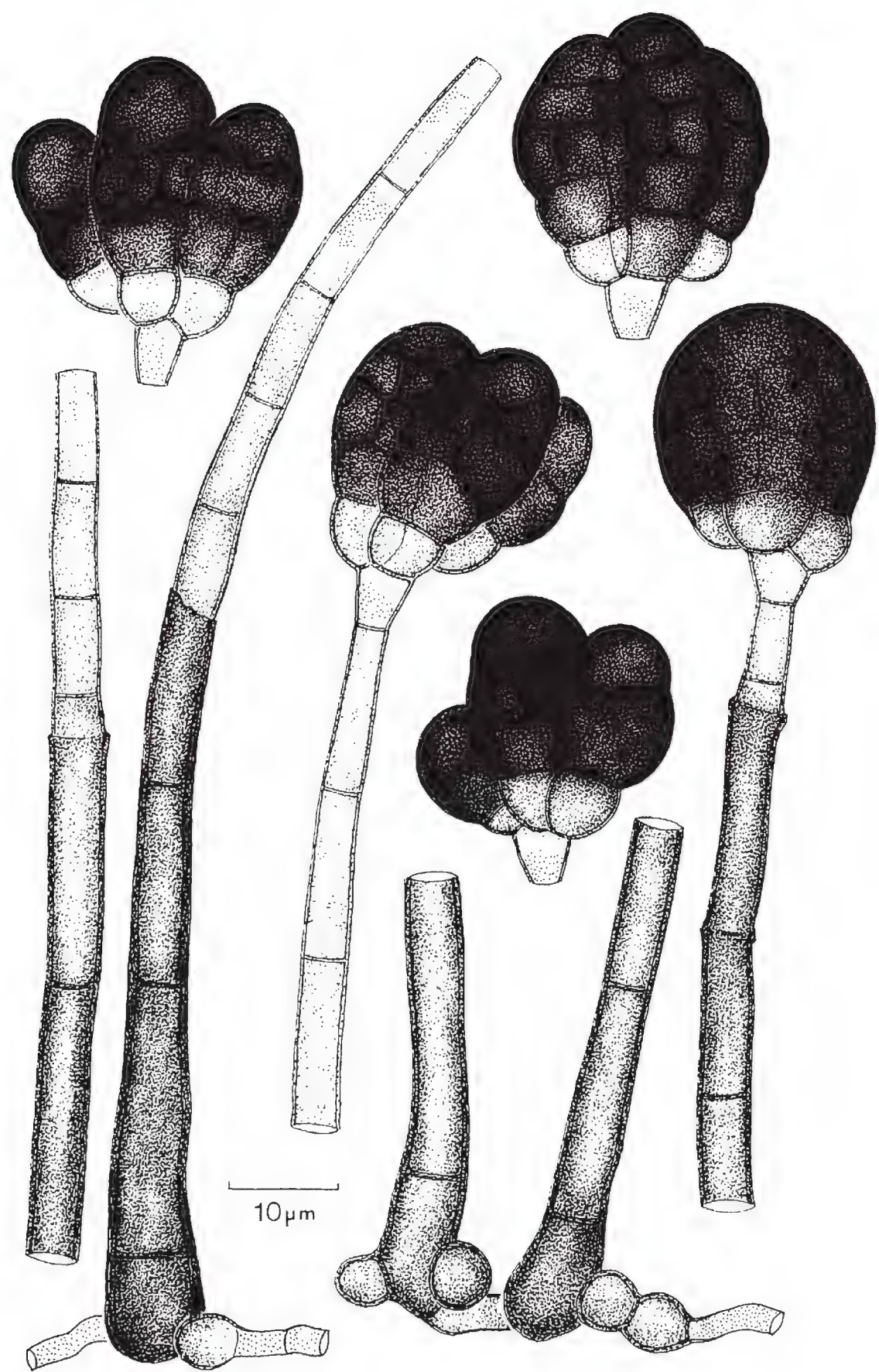


FIG. 3. *Cheiroidea triarmata*. Line drawings of conidiophores and conidia (holotype, HKU(M) 13034).

primary branches. The basal cells of the conidia are paler than the dark brown terminal cells that comprise most of the conidial body.

CORYNESPORINA Subram., gen. nov.

MYCOBANK MB 513877

Corynesporina Subram., Nova Hedwigia 59: 268. 1994. nom. inval. Art. 37.1.

TYPE SPECIES: *Corynesporina elegans* Subram., sp. nov.

MYCOBANK MB 513878

Corynesporina elegans Subram., Nova Hedwigia 59: 268. 1994. nom. inval. Arts 37.1, 43.1.

The Latin diagnoses of the both the species and the genus were published on the page indicated. The missing information on the location of the holotype was obtained from the author, and the genus and species are thus validated here: On dead leaf (in litter) of *Smilax calophylla* Wall. (*Smilacaceae*), McRitchie Reservoir, Singapore, 20 May 1987, coll. C.V. Subramanian (S 141a), Herb. MUBL 3523.

FLAHAULTIA G. Arnaud 1951. nom. inval. Arts 36, 37.

According to Nicot & Charpentié (1971), there is no type specimen for this genus, which is nevertheless recognizable from Arnaud's illustration. The specimens that we have found are consistent with Arnaud's generic concept, but have smaller conidia and shorter conidiophores and thus represent a different species from Arnaud's *F. hyalina*. Despite several attempts, we were unable to culture our fungus, and suspect it is more likely to be a mycoparasite of, rather than the anamorph of, a *Sebacina* sp., as has sometimes been hypothesized (e.g. Watling & Kendrick 1979). Because the name *Flahaultia* is preoccupied by a red alga, we are introducing our fungus with an appropriate holotype as the type of a new genus, *Flahaultiella*.

FLAHAULTIELLA Seifert, gen. nov.

MYCOBANK MB 514100

[*Flahaultia* G. Arnaud, Bull. trimest. Soc. mycol. Fr. 67: 195. 1951, nom. inval. Art. 53, non Bornet 1892 (*Rhodophyta*)]

Conidiophora monoverticillata, hyalina, levia, uno septo prope basim separata, fibulis carentia. Cellulae conidiogenae hyalinae, ad apicem binae vel ternae verticillatae, cylindricae vel subulatae, laterales axim versus valde curvatae, monoblasticae vel semel vel bis sympodialiter proliferantes, conidiis isthmo connexae, post liberationem schizolyticam cicatricem inconspicuam paulo obscuriorem relinquentes. Conidia hyalina, unicellularia, ellipsoidea vel oblonge ellipsoidea, nonnumquam paulo asymmetrica vel curvata, ad basim primum truncata sed deinde rotundata, in massa mucida transparente aggregata.

TYPE SPECIES: *Flahaultiella microspora* Seifert.

Flahaultiella microspora Seifert, sp. nov.

MYCOBANK MB 514101

FIGS. 4, 5

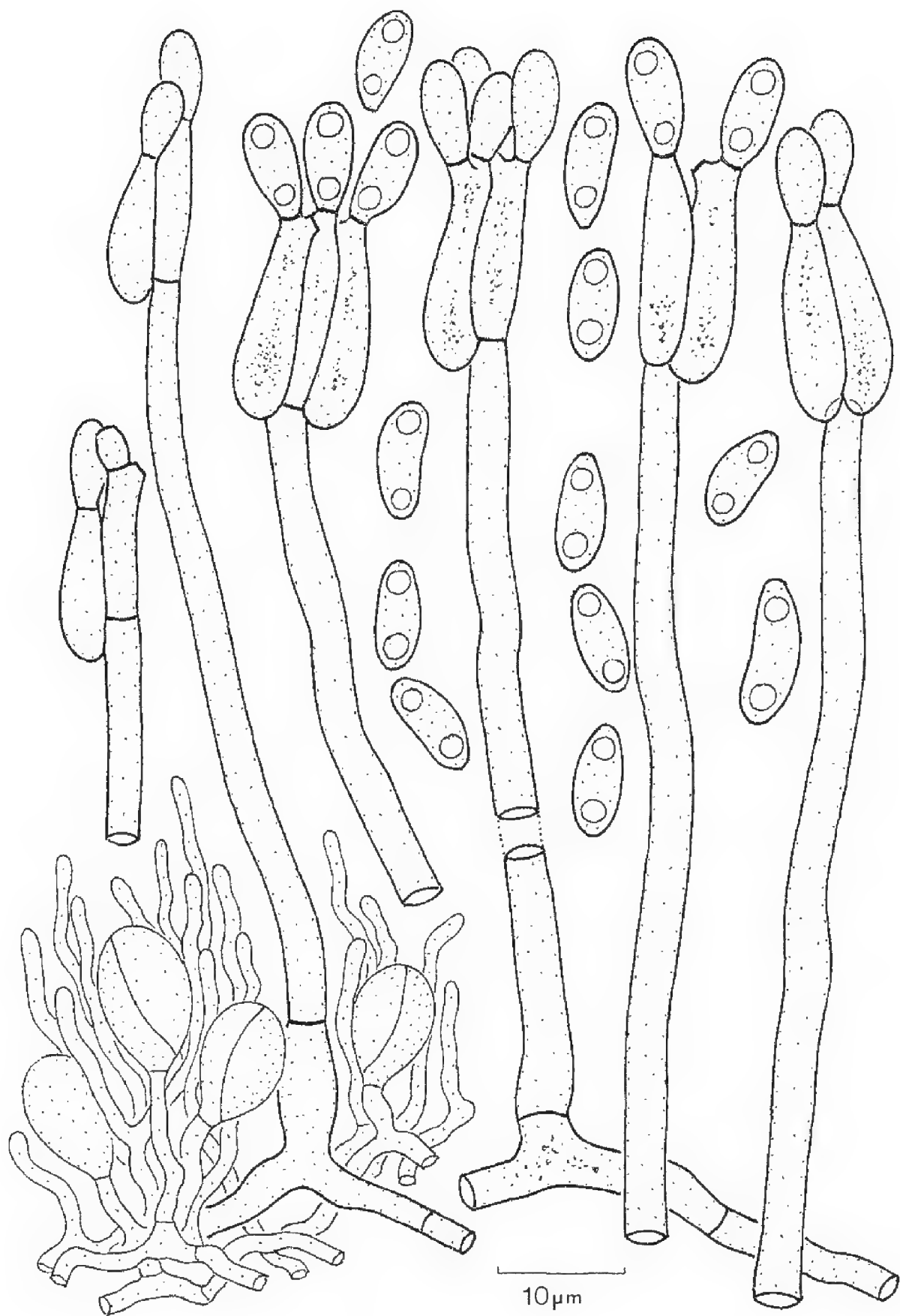


FIG. 5. *Flahaultiella microspora*, Line drawings of conidiophores emerging from tremelloid host, conidia (holotype, DAOM 238641).



FIG. 4. *Flahaultiella microspora*, phase contrast micrographs of conidiophores and conidia (holotype, DAOM 238641).

Conidiophora circa 40–60 μm alta, e 5–7 μm prope basim ad 2.5–4 μm sursum angustata. *Cellulae conidiogenae*: una axialis 10–17 $\times$ 3–4.5 μm , 1–2 laterales 12–20.5 $\times$ 3.5–5 μm , *conidiis* isthmo 1.5–3 μm lato connexae. *Conidia* 8–10.5 $\times$ 2–3 μm (in medio $8.5 \pm 0.1 \times 3.5 \pm 0.1 \mu\text{m}$), in massa mucida circa 15–20 μm diam aggregata.

TYPE: on dead wood of *Populus* sp., associated with *Sebacina* sp., Fletcher Wildlife Garden, Ottawa, Canada (N 45°23'12", W 75°42'08"), 13 June 1997, coll. K.A. Seifert (s.n.). Holotype: DAOM 238641.

Colonies effuse, inconspicuous. Conidiophores monoverticillate, about 40–60 μm tall, hyaline, smooth-walled, with a single septum just above the base, the stipes tapering, 5–7 μm wide at the basal septum, 2.5–4 μm wide below the conidiogenous cells; lacking clamp connections; apparently losing its cytoplasm during development. Conidiogenous cells hyaline, occurring in a terminal whorl of (2–)3; one cell continuing the axis of the stipe of the conidiophore, cylindrical or subulate, 10–17 $\times$ 3–4.5 μm ; the other two appressed to the axis, curving abruptly at the base to meet the conidiophore stipe at nearly a right angle, 12–20.5 $\times$ 3.5–5 μm ; monoblastic or extending sympodially for a short distance (< 3 μm) 1–2 times, with a broad connection to the conidia 1.5–3 μm wide, leaving a slightly dark scar and inconspicuous frills after schizolytic secession; apparently losing cytoplasm during conidiogenesis. Conidia hyaline, aseptate, 8–10.5 $\times$ 2–3 μm (mean = $8.5 \pm 0.1 \times 3.5 \pm 0.1 \mu\text{m}$, $n = 25$), ellipsoidal or oblong ellipsoidal, sometimes slightly asymmetrical or slightly curved, base at first truncate but rounded at maturity, accumulating in clear slimy mass about 15–20 μm diam.

We have not seen specimens with conidia that match the dimensions for *Flahaultia hyalina* G. Arnaud, and thus the status of that species will remain uncertain until new specimens are collected.

FUSARIUM Link 1809 : Fr.

A few combinations proposed by Nirenberg (1976) lacked a full basionym citation. Some of these names have become generally accepted and no older competing names have been discovered:

Fusarium proliferatum (Matsush.) Nirenberg, Mitt. Biol. Bundesanst. Ld- u. Forstw. 169: 38. 1976,

was validated as:

Fusarium proliferatum (Matsush.) Nirenberg ex Gerlach & Nirenberg, Mitt. Biol. Bundesanst. Ld- u. Forstw. 209: 309. 1982.

MYCOBANK MB 509381

Fusarium proliferatum var. *minus* Nirenberg 1976

was since renamed

Fusarium phyllophilum Nirenberg & O'Donnell 1998

and need not be validated separately.

Fusarium sacchari var. *subglutinans* (Wollenw. & Reinking) Nirenberg 1976

would require validation at this rank, but this fungus was validly renamed and recognized as

Fusarium subglutinans (Wollenw. & Reinking) Nelson, Toussoun & Marasas (Nelson et al. 1983).

Fusarium acutatum Nirenberg & O'Donnell

MYCOBANK MB 444880

The 1998 publication of this species was considered invalid according to Art. 37.7 (formerly Art. 37.3, Index of Fungi 6: 979, 1999). The authors listed BBA 69580 and some other deposits for the single ex-type culture, a dried culture of which was then deposited in herb. B. We regard this as a sufficient unequivocal characterization of the type material in accordance with Art. 37.7.

GOIDANICHIELLA G.L. Barron ex W. Gams, **gen. nov.**

MYCOBANK MB 513879

Goidanichiella G.L. Barron ex W. Gams, in Gams, Steiman & Seigle-Mur., Mycotaxon 38: 152. 1990, nom. inval. Art. 37.7.

TYPE SPECIES:

Goidanichiella barronii W. Gams, Steiman & Seigle-Murandi, **sp. nov.**

MYCOBANK MB 513880

Goidanichiella barronii W. Gams, Steiman & Seigle-Murandi, Mycotaxon 38: 152. 1990, nom. inval. Arts 37.7, 43.1.

?= *Goidanichiella scopula* (Preuss) G. L. Barron, Gen. Hyphom Soil, 180. 1968, nom. inval. Arts 32.6, 43.1.

Gams et al. (1990) intended to validate this genus, introduced previously by Barron (1968), by providing a Latin diagnosis and describing the new species *Goidanichiella barronii* as its type. The type material of *G. barronii* was indicated as 'CBS 101.89 = CMPG 426', which rendered the name invalid according to Art. 37.7. This designation of a living culture also would have invalidated the novelty according to the then relevant Art. 37.1 (Index of Fungi 6: 76). However, since that publication, Art. 8.4 was added to the ICBN, allowing metabolically inactive fungal cultures to serve as type. At that time, it was already standard practice at CBS to preserve all new accessions as lyophiles and also to dry Petri dish cultures to be maintained in the herbarium (for this fungus, herb. no. 4390, dried Dec. 1989). Because of the retroactivity of Art. 8.4, both the genus and the species would now be acceptable as validly published were it not for the inclusion of the CMPG number. Following the original designation, the lyophile culture of CBS 101.89 must serve as type.

The other species described in the genus are consequently invalid according to Art. 43.1 and require revalidation.

***Goidanichiella sphaerospora* Matsushima, sp. nov.**

MYCOBANK MB 513883

Goidanichiella sphaerospora Matsushima, Icon. Microfungorum Matsush. lect., p. 77, 1975, nom. inval. Art. 43.1.

Latin diagnosis in Icon. Microfungorum Matsush. lect., p. 77, 1975. Typus MFC 2613.

***Goidanichiella fusiformis* K.D. Hyde, Yanna, Pinnoi & E.B.G. Jones, sp. nov.**

MYCOBANK MB 513882

Goidanichiella fusiformis K.D. Hyde, Yanna, Pinnoi & E.B.G. Jones (as '*G. fusiforma*'), Fungal Diversity 11: 119, 2002, nom. inval. Art. 43.1.

Latin diagnosis in Fungal Diversity 11: 119, 2002. Typus HKU(M) 13225.

***Goidanichiella cylindrospora* D.W. Li & G.H. Zhao, sp. nov.**

MYCOBANK MB 513881

Goidanichiella cylindrospora D.W. Li & G.H. Zhao, Mycotaxon 101: 42, 2007, nom. inval. Art. 43.1.

Latin diagnosis in Mycotaxon 101: 42, 2007. 1992. Typus BPI 877773.

Because Art. 8.4 is effective retroactively, it may also affect several species of *Acremonium* published by Gams (1971), and also must be considered in future studies of that genus.

***HARZIELLA* Costantin & Matr. 1899**

nom. illegit. Art. 53.1, a homonym of *Harziella* Kuntze 1891 (hyphomycetes).

Kuntze introduced this generic name originally to replace *Trichocladium* Harz 1871, because of supposed homonymy with *Trichocladus* Pers. 1807 (*Hamamelidaceae*). *Harziella capitata* Costantin & Matr. is a characteristic

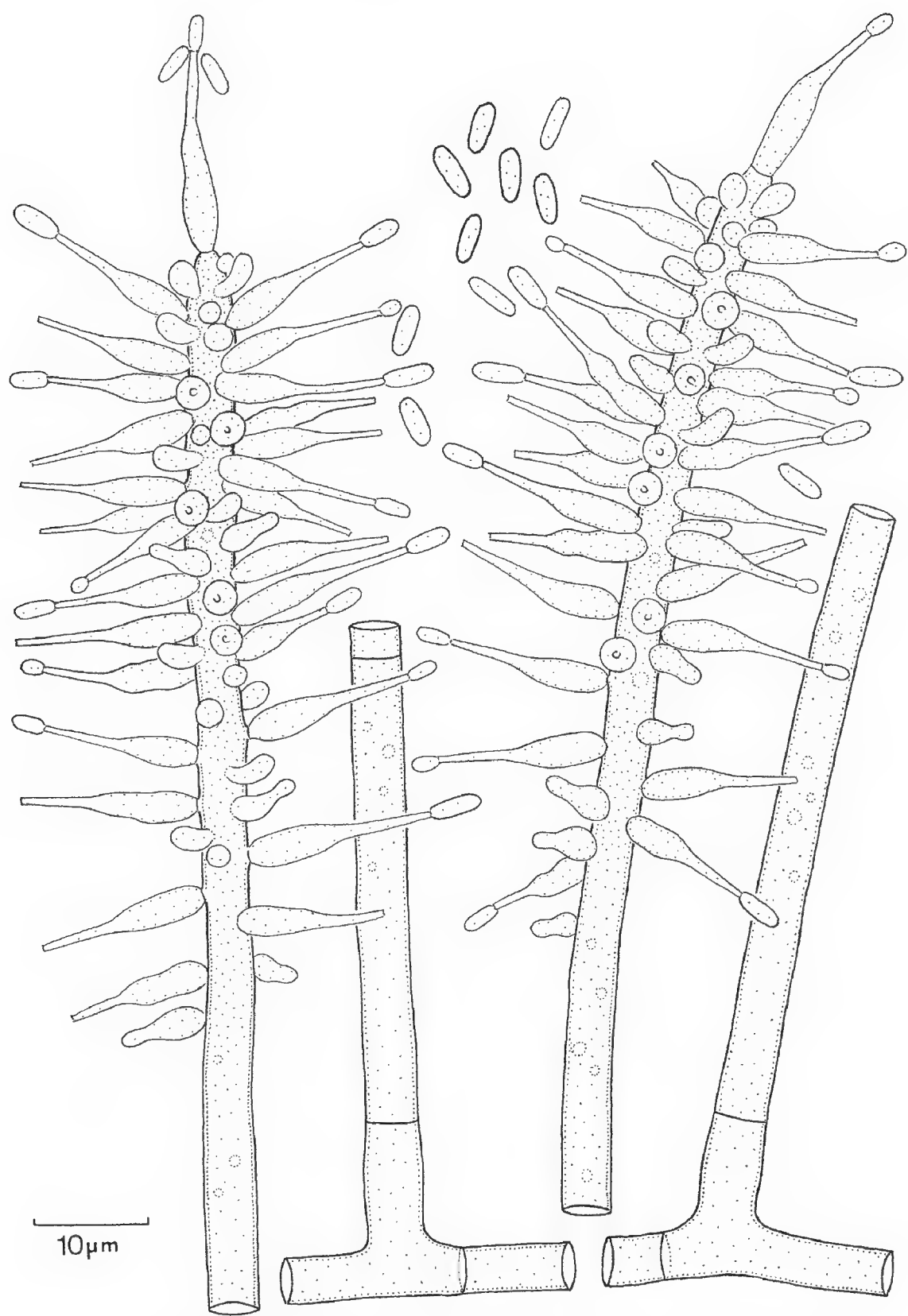


FIG. 6. *Lepisticola capitata*, conidiophores and conidia (DAOM 237837).

hypocrealean, phialidic, hyphomycetous anamorph growing on basidiomata of the agaric *Lepista nuda* (Bull.) Cooke, well illustrated by the original authors but for which no legitimate generic name is available. Other species often referred to *Harziella* Costantin & Matr. [anamorphs of *Melanospora* (Ceratostomataceae)]

and synanamorphs of species of *Harzia* Costantin 1888 and *Olpitrichum* G.F. Atk.] are properly classified in *Proteophiala* Cif. 1957.

LEPISTICOLA W. Gams, **nom. nov.**

MYCOBANK MB 514102

= *Harziella* Costantin & Matr., Bull. Soc. Mycol. Fr. 15: 107, 1899.

TYPE SPECIES: ***Lepisticola capitata*** (Costantin & Matr.) W. Gams, **comb. nov.** FIG. 6

MYCOBANK MB 514103

= *Harziella capitata* Costantin & Matr., Bull. Soc. Mycol. Fr. 15: 107, 1899 (basionym).

LIVING CULTURES: CBS 182.64, CBS 140.92, DAOM 237837. A dried culture of CBS 182.64, CBSH 20310, is designated here as **NEOTYPE**.

MACKENZIEA Yanna & K.D. Hyde 2002

nom. illegit. Art. 53, a homonym of *Mackenziea* Nees 1847 (*Acanthaceae*).

To be replaced by:

MACKENZIELLA Yanna & K.D. Hyde, **nom. nov.**

MYCOBANK MB 514104

= *Mackenziea* Yanna & K.D. Hyde, Aust. syst. Bot. 15: 757. 2002, nom illegit. Art. 53.1.

TYPE SPECIES: ***Mackenziella livistonae*** (Yanna & K.D. Hyde) Yanna & K.D. Hyde, **comb. nov.**

MYCOBANK MB 514105

= *Mackenziea livistonae* Yanna & K.D. Hyde, Aust. syst. Bot. 15: 757. 2002 (basionym).

ETYMOLOGY: A diminutive of *Mackenziea*.

MARIANNAEA G. Arnaud ex Samson 1974

The only teleomorph known to be associated with a species of this genus, *Nectria mariannaeae* Samuels & Seifert (1992), is invalid (Art. 37.7); the holotype was indicated as deposited in VEN and NY. The authors' intention was to designate VEN 2980 deposited in VEN as the single holotype specimen and this is stated explicitly here; the specimen in NY is an isotype.

Nectria mariannaeae Samuels & Seifert, **sp. nov.**

MYCOBANK MB 513884

Latin diagnosis in Sydowia 43: 257. 1992. Typus VEN 2980.

This species was not reconsidered in the redistribution of species of *Nectria* (Tode) Fr. sensu lato by Rossman et al. (1999), and it is likely that it will eventually be transferred to another genus.

NEMATOGRAFIUM Goid., Annali Bot. 21: 46, 1935.

MYCOBANK MB 9090

Goidànich (1935) transferred five species from *Graphium* Corda to this new genus. Of these, we could find no type specimens for *Graphium strictum* Preuss (not listed in the Preuss herbarium by Jülich 1974), *G. saccardoi* Peyronel (not in PAD), and *G. stilboideum* Corda (not in PRM). *Graphium leucophaeum* Sacc.

was considered a taxonomic synonym of *Gracilistilbella aterrima* (Welw. & Curr.) Seifert by Seifert (1985, as *Stilbella*). The fifth species, based on *Clavularia hippotrichoides* Lindau, is well typified by a specimen in Lindau's herbarium in B. It is an entomogenous species, congeneric with several others misclassified in *Tilachlidiopsis* Keissl. and *Stilbella* Lindau. This complex will be the subject of a comprehensive revision, but the generic name is fixed by here designating *C. hippotrichoides* as the **lectotype** species of *Nematographium*:

Nematographium hippotrichoides (Lindau) Goid., *Annali Bot. (Roma)* 21: 46. 1935

MYCOBANK MB 230599

= *Clavularia hippotrichoides* Lindau, *Rabenh. Krypt. Fl. Ed. 2, 1(9)* 313. 1910 (basionym) (B!).

= *Graphium hippotrichoides* (Lindau) Sacc., *Syll. Fung.* 22: 1449. 1913.

= *Tilachlidiopsis hippotrichoides* (Lindau) Keissl., *Annln naturh. Mus. Wien* 37: 216. 1924.

SEPTOSPORIOPSIS W.A. Baker & Morgan-Jones, **gen. nov.**

MYCOBANK MB 514106

Coloniae effusae, pilosae velutinae, atrobrunneae vel atrae. Mycelium partim superficiale vel plerumque immersum, ex hyphis ramosis, septatis, pallide brunneis compositum. Conidiophora semi-macronemata, mononemata, singula, ex hyphis lateralibus oriunda, simplicia, erecta vel ascendente, recta vel leniter flexuosa, laevia, crassitunicata, cylindrica, continua vel septata, pallide vel medio brunnea, sursum pallidiora, indeterminata, plerumque percurrenter proliferantia. Cellulae conidiogenae in conidiophoris incorporatae, terminales, monoblasticae, pallide brunneae, anguste cuneatae, apicem versus truncatae. Cellula separans liberatione disrupta. Conidia holoblastica, solitaria, sicca, acrogena, ellipsoidea, septis transversalibus et interdum longitudinalibus divisa, laevia, plerumque cellulis lateralibus protrudentibus praedita, brunnea vel atrobrunnea, cellula superiore et basali pallidioribus, ad basim minute fimbriata, secessio rhexolytica.

TYPE SPECIES: ***Septosporiopsis elaeidis*** (J.M. Yen & Sulmont) W.A. Baker & Morgan-Jones, **comb. nov.**

FIG. 7

MYCOBANK MB 514107

= *Acrodictys elaeidis* J.M. Yen & Sulmont, *Cah. La Maboké* 8: 35. 1970 (basionym).

= *Septosporium elaeidis* (J.M. Yen & Sulmont) Piroz., *Mycol. Pap.* 129: 23. 1972.

= *Acrodictys elaeidis* var. *cubensis* Hol.-Jech., *Česká Mykol.* 37: 12. 1983.

ETYMOLOGY: *Septosporium* + Greek *-opsis* = aspect of.

This species is excluded from *Acrodictys* because of its reduced rather than macronematous conidiophores, and the percurrently extending conidiogenous locus that extends beyond the remains of a separating cell after rhexolytic conidial secession. It differs from the species of *Septosporium* Corda by lacking a phialidic (or pycnidial) element as part of the body of the conidium, and the absence of erect, dark, thick-walled setae.

SYMPHYOSIRA Preuss 1853 ('1852')

The holotype of the type species, *S. lutea* Preuss 1853, has no identifiable fungus (B!) and the protologue lacks sufficient clues to the identity of this

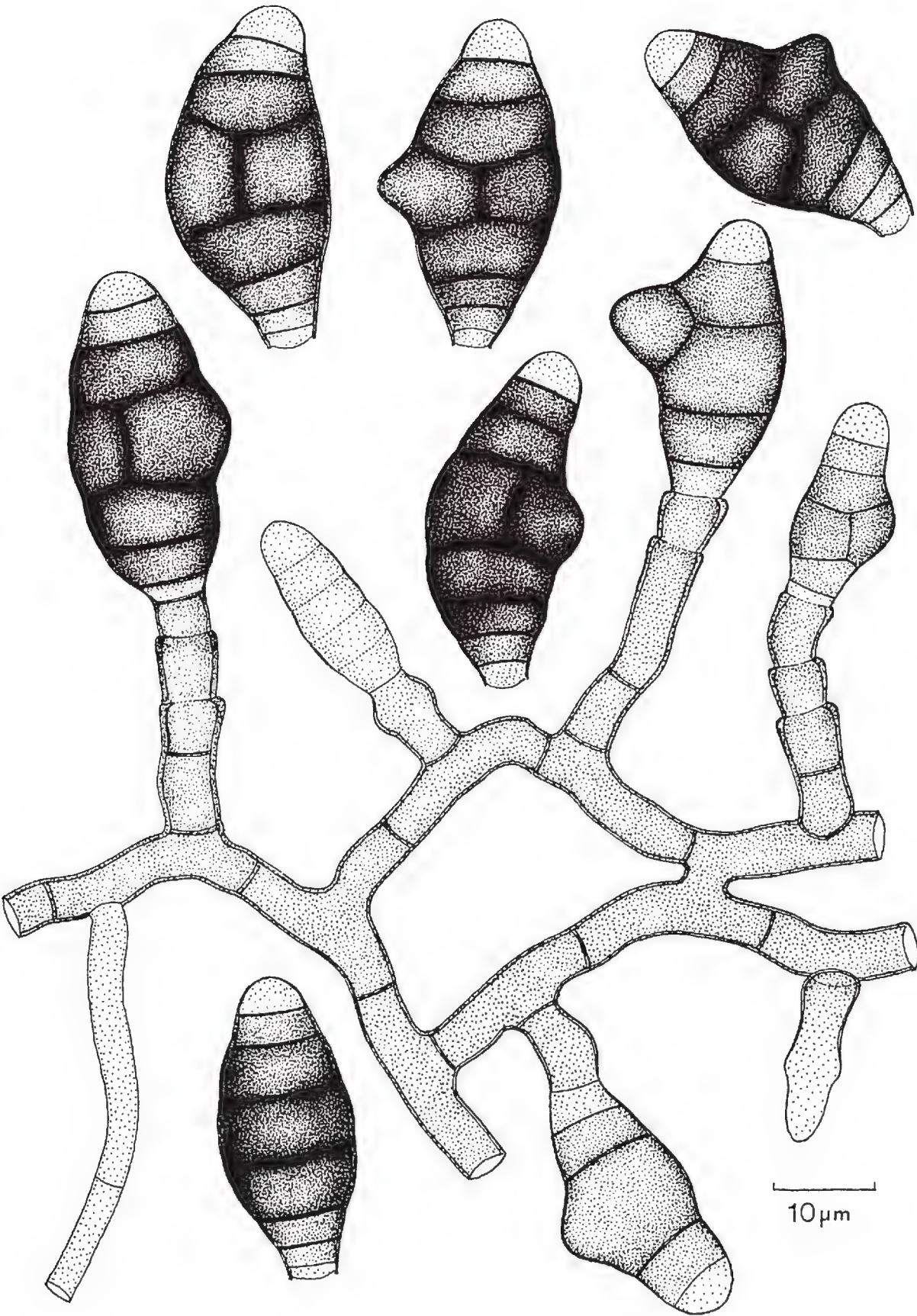


FIG. 7. *Septosporiopsis elaeidis*. Conidiophores and conidia (DAOM 134086).

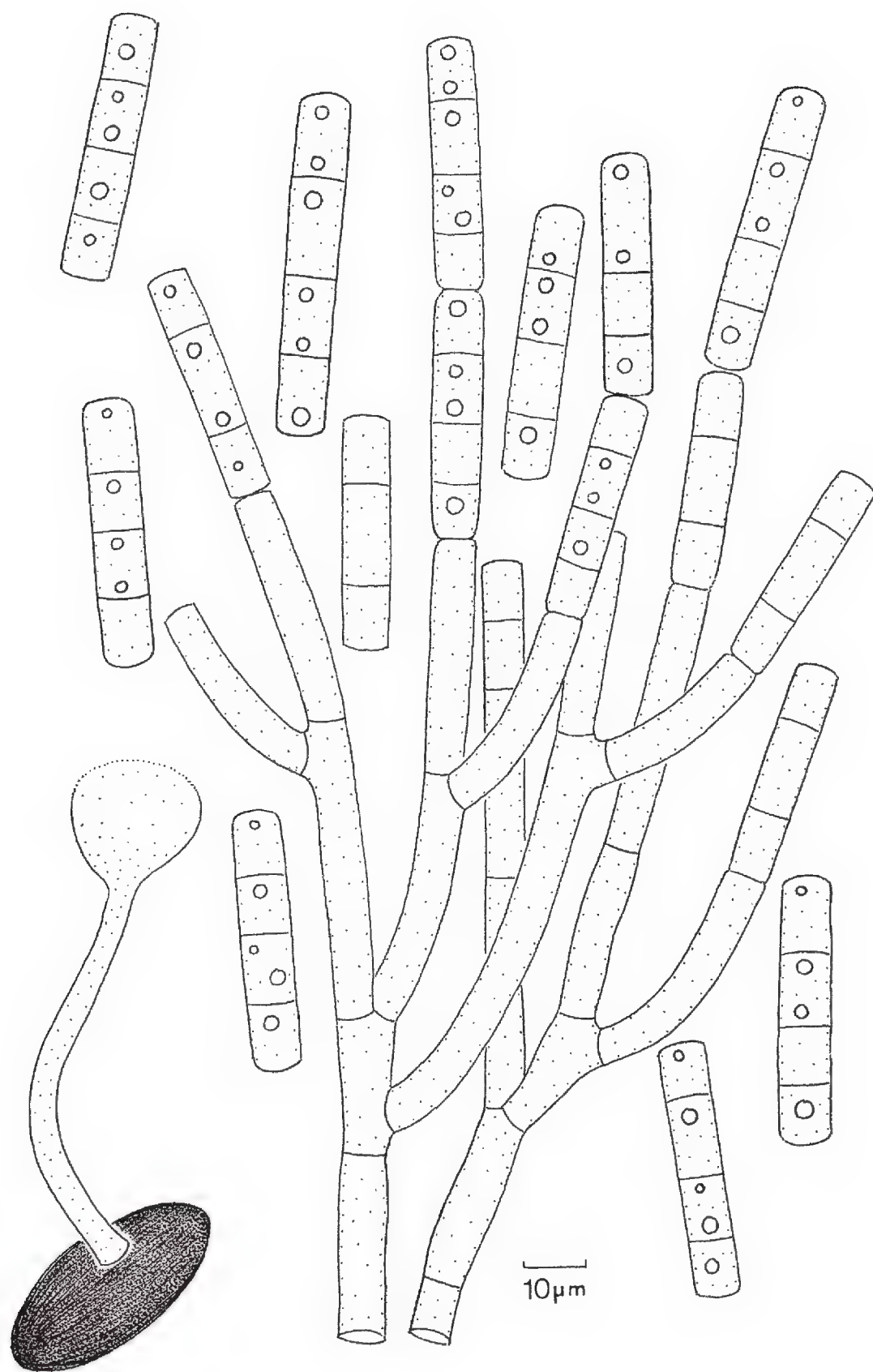


FIG. 8. *Symphyosirella parasitica*. Synnema, conidiophores and conidia (holotype W3317).

species. *Symphyosira parasitica* Masee & Crossl. and *S. rosea* Keissl. are relatively well understood species, apparently obligate parasites of seeds, and are the basis for the prevailing application of *Symphyosira* by Keissler (1913), Ellis (1956) and Baral (1994) for anamorphs of *Symphyosirinia* E.A. Ellis, a concept that excludes the lignicolous *S. lutea*. Rather than proposing conservation of *Symphyosira* with a new type, we describe the new genus *Symphyosirella* for these two species.

SYMPHYOSIRELLA Seifert, gen. nov.

MYCOBANK MB 514108

Conidiomata synnemata, determinata, pallida, apice capitato. Conidiophora nonramosa vel parceramosa, vel monovorticillata, hyalina. Cellulae conidiogenae thallicae-arthricae, hyalinae. Conidia phragmoseptata, hyalina, mucosa, in catenis disposita, secessio schizolytica, conidia juvenia nonnumquam 2-3 setulis apicalibus praedita. Teleomorphosis Symphyosirinia (Helotiales).

ETYMOLOGY: A diminutive of *Symphyosira*.

TYPE SPECIES: *Symphyosirella parasitica* (Masee & Crossl.) Seifert, **comb. nov.**

FIG. 8

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= *Symphyosira parasitica* Masee & Crossl., Naturalist (Jan. 1904): 6. 1904 (basionym, **HOLOTYPUS** K!).

Symphyosirella rosea (Keissl.) Seifert, **comb. nov.**

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= *Symphyosira rosea* Keissl., Mykol. Zentbl. 2: 322. 1913 (basionym, **HOLOTYPUS** W 3317!).

Neither *S. rosea* nor *S. parasitica* has been conclusively demonstrated to be the anamorph of a known *Symphyosirinia* species, but they are clearly congeneric with the anamorph of *Symphyosirinia* described by Ellis (1956).

Of the remaining three species attributed to *Symphyosira*, we have not recombined the seed pathogen *S. clematidis* Baral (the anamorph of *Symphyosirinia clematidis* Baral, see Baral 1994). It differs from *S. parasitica* and *S. rosea* in details of conidiogenesis, and perhaps morphogenesis of synnemata, characters that require taxonomic re-evaluation. The holotype of the lignicolous species *S. alba* P. Karst. (H) represents a sporodochial fungus with acropetal chains of didymoconidia, and will be treated in a future publication along with similar specimens collected in Canada. *Symphyosira areola* (G.F. Atk.) Sawada is a synonym of *Ramulariopsis gossypii* (Speg.) U. Braun (Braun 1993).

SYNNEMACRODICTYS W.A. Baker & Morgan-Jones, gen. nov.

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Coloniae effusae, pilosae, brunneae vel atro-brunneae. Mycelium immersum, ex hyphis ramosis, septatis, laevibus, brunneis compositum. Synnemata determinata, erecta, simplicia, atro-brunnea vel nigra, apice capitato. Conidiophora macronemata, recta vel leniter flexuosa, ramosa, simplicia, cylindrica, septata, laevia, olivaceo-brunnea

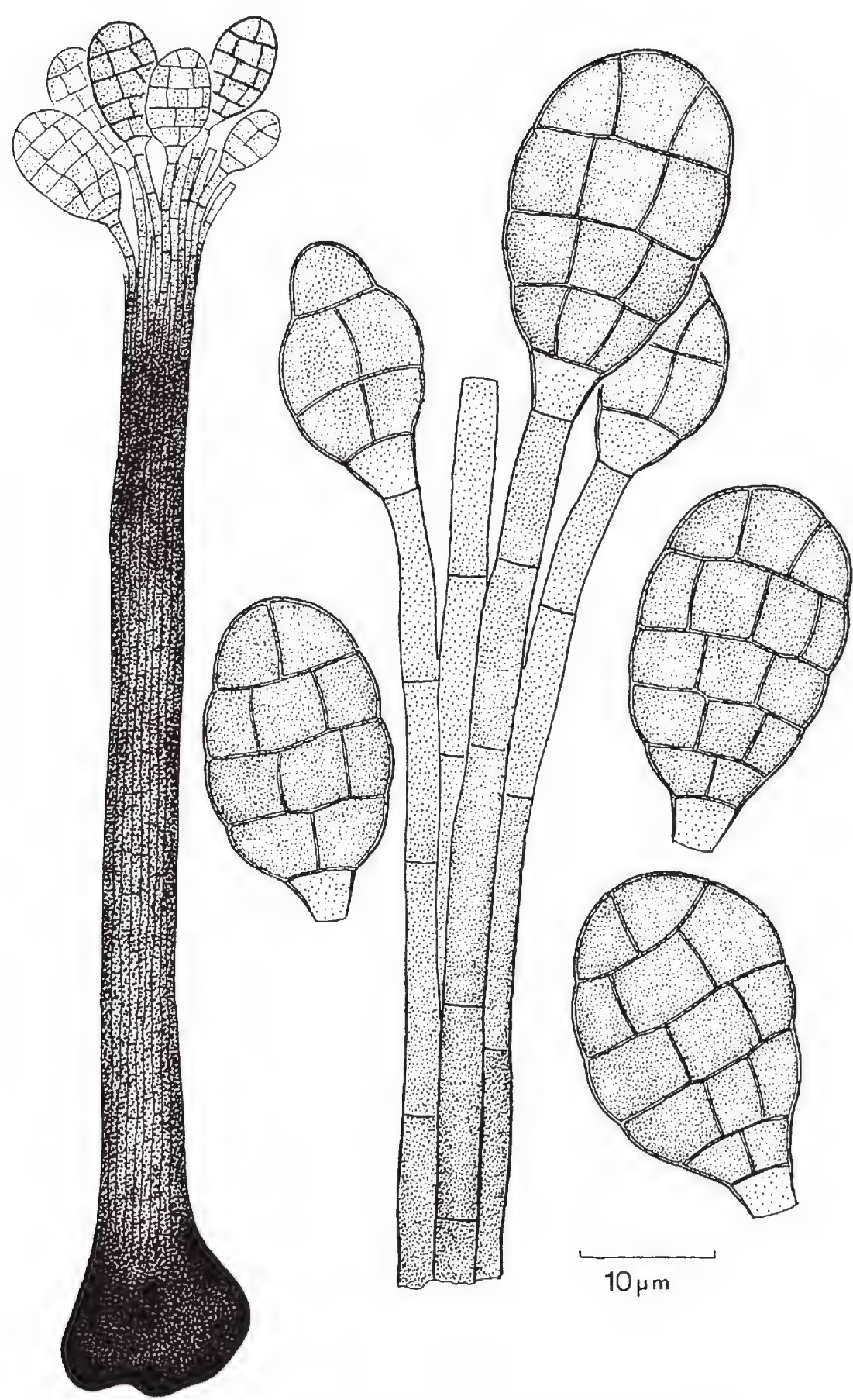


FIG. 9. *Synnemacrodictys stilboidea*. Conidiophores and conidia (redrawn and modified from the protologue).

vel brunnea. Cellulae conidiogenae monoblasticae, in conidiophoris incorporatae, terminales, determinatae, cylindricae. Conidia holoblastica, solitaria, sicca, acrogena, septis transversalibus et longitudinalibus divisa, laevia, ellipsoidea vel turbinata, olivaceo-brunnea, cellula basali pallidiore, truncata, secessio schizolytica.

TYPE SPECIES: *Synnemacrodictys stilboidea* (J. Mena & Mercado) W.A. Baker & Morgan-Jones, **comb. nov.** FIG. 9

MYCOBANK MB 514112

= *Acrodictys stilboidea* J. Mena & Mercado, Acta Bot. Hung. 32: 190. 1986 (basionym, HOLOTYPUS HAC 7040 non vidimus).

ETYMOLOGY: *synnema*, indicating the type of conidiomata + *Acrodictys*.

The synnematous conidiomata, and lack of percurrent proliferation of the conidiogenous cells, exclude this species from inclusion in *Acrodictys*.

Acknowledgments

We are grateful to C.V. Subramanian for clarifying the location of his type specimen; Kevin Hyde for his willingness to describe *Mackenziella* and present the new combination in *Goidanichiella* here; Rafael Castañeda Ruiz for his permission to describe *Mycelephas* here; Helgard I. Nirenberg for her agreement with the *Fusarium* treatment; W.A. Baker for access to the information published in his PhD thesis; and T. Matushima, D.W. Li, and G.H. Zhao for agreeing to validate their species of *Goidanichiella* here. The curators of B, CBS, DAOM, HKU(M), IMI and W kindly loaned specimens from their collections. Kathie Hodge shared the culture that served as the basis for FIG. 6. Scott Redhead, Paul M. Kirk, Shaun Pennycook, and Toni Atkinson provided many constructive suggestions as pre-reviewers.

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